CAFO FACILITY INSPECTION REPORT

OFFICE NO: PCA SYSTEM TASK NO:

INSPECTOR(S): Jared Richardson (PG Environmental, LLC) and Anthony D'Angelo (PG Environmental, LLC)

FACILITY INFORMATION

8365786001 WDID NUMBER	**Augustine Simoes** OWNER NAME	**Simoes Dairy -- Riverside** FACILITY NAME
CA0108001 NPDES NUMBER	**Ex. 6 Personal Privacy (PP)**	
R8-2007-0001 RWQCB ORDER NO.	**Ontario, CA 91761** OWNER CITY AND STATE	**Ontario, CA 91761** FACILITY CITY AND STATE
03/04/2013 SCHEDULED INSPECTION DATE	**Augustine Simoes** OWNER CONTACT	**Al Simoes** FACILITY CONTACT
03/04/2013 ACTUAL INSPECTION DATE	O Ex. 6 Personal Privacy (PP)	**909-615-9397** FACILITY PHONE NO.
Santa Ana River RECEIVING WATER	**Ex. 6 Personal Privacy (PP)** FACILITY LATITUDE	FACILITY LONGITUDE

INSPECTION TYPE

- ☐ (A1) "A" type compliance -- (EPA Type S)
- ☒ (B1) "B" type compliance -- (EPA Type C)
- ☐ (02) Noncompliance follow-up - Correction of a previously identified violation
- ☐ (03) Enforcement follow-up - Enforcement action is being met
- ☐ (04) Complaint - Complaint
- ☐ (05) Pre-requirement
- ☒ (06) Miscellaneous

_____ (Type) NOTE: If this is an EPA inspection not mentioned above, please note type (e.g., biomonitoring, performance audit, diagnostic, etc.)

No	Was the inspection pre-announced?
Yes	Were potential violations noted during this inspection?
No	Was this a quality assurance-based inspection?
No	Were bioassay samples collected?
No	Were water quality samples collected?

INSPECTION SUMMARY

The overall Facility rating, on a 1 (Unreliable) to 5 (Very Reliable) scale, was determined to be: 2 = Marginal.

Simoes Dairy -- Riverside (hereinafter, Facility) was rated "Marginal" due to the following reasons:

- **Depth markers were not installed in lagoon No. 1 or basin Nos. 2-7 (refer to Photos 2, 3, and 4)**
- **Weekly Storm Water Management Structure visual inspections did not contain the minimum required information, and were not conducted weekly (refer to Exhibit 1)**
- **Annual Reports for the previous five (5) years were not available for review**
- **Manure Tracking Manifests are not documented or maintained of all haul events by the Discharger**
- **The Engineered Waste Management Plan (EWMP) was not retained onsite or available for review at the time of the inspection**
- **The Site Plan was not reflective of current Facility conditions**
- **Daily inspections of all ponds, berms, and wastewater distribution and application equipment was not being conducted during the wet season as specified in the approved EWMP**
- **Facility process wastewater application fields are not disked per the approved EWMP frequency**

- Accumulated solids and vegetation growth was observed in lagoon No. 1 (refer to Photos 5, 6, and 7)
- Process wastewater is applied offsite at an adjacent property that is not owned or operated by the Discharger (refer to Photos 8 and 9)

INSPECTOR DATA

INITIALS AJD/JCR SIGNATURE _____ DATE 03/04/2013

CIWQS DATA ENTRY DATE: _____ REGIONAL BOARD FILE NUMBER: _____

FOR INTERNAL USE: REVIEWED BY: (1)_____ (2) _____ (3) _____

REPORT PREPARED BY: Anthony D'Angelo (PG Environmental, LLC) ON 03/11/2013

EPA SUGGESTED INSPECTION CHECKLIST

☒ Permit	☐ Flow Measurement	☐ Pretreatment	☒ Operations & Maintenance
☒ Records/Reports	☐ Laboratories	☐ Compliance Schedules	☐ Sludge Disposal
☒ Facility Site Review	☐ Eff/Receiving Waters	☐ Self- Monitoring	☐ Other

POTENTIAL VIOLATIONS

1. Depth markers were not installed in lagoon No. 1, and basin Nos. 2 through 7 as required by Permit Attachment B - Monitoring and Reporting Program, Section I.B.1 (refer to Photos 2, 3, and 4).

Description of Potential Violation: **Refer to Item No. 1 of the 'Inspection Observations' section of this report for additional details.**

2. Weekly Storm Water Management Structure visual inspections for both the 2012 and 2013 monitoring years did not contain the minimum required information and were not conducted weekly, as required by Permit Attachment B - Monitoring and Reporting Program, Section I.B.1-3.

Description of Potential Violation: **Refer to Item No. 1 of the 'Annual Report Review' section of this report for additional details.**

3. Manure Tracking Manifests were not documented or maintained for all manure haul events by the Discharger, as required by Provision VII.C.5.e of the Permit.

Description of Potential Violation: **Refer to Item No. 3 of the 'Annual Report Review' section of this report for additional details.**

4. The EWMP was not retained onsite or available for review at the time of the inspection as required by Provision VII.C.3.c of the Permit.

Description of Potential Violation: **Refer to Item No. 1 of the 'Engineered Waste Management Plan Review' section of this report for additional details.**

5. The EWMP Site Plan was not representative of current Facility conditions at the time of the inspection as required by Provision VII.C.3.b of the Permit.

Description of Potential Violation: **Refer to Item No. 2 of the 'Engineered Waste Management Plan Review' section of this report for additional details.**

6. Daily inpsections of all ponds, berms, and wastewater distribution and application equipment during the wet season was not conducted at the Facility, as specified in the approved EWMP, as required by Provision VII.C.3.b of the Permit.

Description of Potential Violation: **Refer to Item No. 3 of the 'Engineered Waste Management Plan Review' section of this report for additional details.**

7. Facility process wastewater application fields are not disked per the approved EWMP frequency, as required by Provision VII.C.3.b of the Permit.

Description of Potential Violation: **Refer to Item No. 4 of the 'Engineered Waste Management Plan Review'**

section of this report for additional details.

8. Accumulated solids and vegetation growth was observed in lagoon No. 1 (refer to Photos 5, 6, and 7). The Discharger must design and maintain all containment structures per the EWMP as required by Provision VII.C.3.a of the Permit.

Description of Potential Violation: **Refer to Item Nos. 2 and 3 of the 'Facility Housekeeping, Wastewater, and Manure Information' section of this report for additional details.**

9. Process wastewater and surface runoff that accumulates in lagoon No. 1 is currently applied on pasturelands at an adjacent property immediately south of the Facility, which is not owned or operated by the Discharger (refer to Photos 8 and 9). Discharge of process wastewater and/or storm water runoff from manured areas to property not owned or controlled by the Discharger is prohibited as stated in Discharge Prohibitions IV.A of the Permit.

Description of Potential Violation: **Refer to Item No. 4 of the 'Facility Housekeeping, Wastewater, and Manure Information' section of this report for additional details.**

Date of Potential Violation: **N/A**

Date of Potential Violation Determination: **03/04/2013**

INSPECTION OBSERVATIONS

On March 4, 2013, a Concentrated Animal Feeding Operation (CAFO) inspection was conducted for Santa Ana Water Board Order No. R8-2007-0001 - 'General Waste Discharge Requirements for Concentrated Animal Feeding Operations (Dairies and Related Facilities) within the Santa Ana Region', NPDES General Permit No. (CAG018001) at Simoes Dairy -- Riverside in Ontario, California (refer to Photo 1). The inspectors provided a phone call and left a voicemail for Mr. Augustine Simoes (Owner, Simoes Dairy -- Riverside) at approximately 9:00 AM on March 4, 2013. The inspectors met with Mr. Al Simoes (Dairyman, Simoes Dairy -- Riverside) at approximately 1:30 PM on March 4, 2013. Mr. Simoes accompanied the inspectors during the Facility site visit. The inspectors held a closing conference with Mr. Simoes at the conclusion of the inspection. During the closing conference, the inspectors reviewed the preliminary inspection findings with the Facility representatives.

The Facility is a 58-acre dairy farm with an animal population of approximately 320 milking cows, 68 dry cows, and 93 heifers at the time of the inspection. The Facility utilizes one (1) wastewater lagoon, seven (7) catch basins, and two (2) pastures to contain all Facility process wastewater and storm water runoff (refer to Photos 2 through 8, and 14). Process wastewater generated at the old milking barn from milking and washing activities flows into a drain immediately south of the wash pen No. 1 (refer to Photos 10 and 11). Wash pen No. 2 is no longer used for dairy operations. Process wastewater is then conveyed west via a sump pump located immediately southwest of wash pen No. 1 (refer to Photos 12 and 13). Process wastewater is then conveyed north via corner valves and an underground pipe along the western side of corral No. 2, and then west to four (4) valve heads positioned along the northern perimeter of pasture No. 1 in the northwest portion of the Facility, adjacent to Riverside Drive (refer to Photo 14). It should be noted that the EWMP Site Plan identifies that process wastewater is conveyed west via the milking barn sump pump to the western perimeter of the Facility, then north to a single valve head located in the northwestern corner of the Facility. Surface runoff from corral Nos. 1 through 4 flows south towards the series of catch basins, or northeast into a low spot in the northeast corner of corral No. 1. Surface runoff from corral Nos. 5 through 12 flows south and collects in the southwest corner of corral No. 7 where it is conveyed via a Polyvinyl Chloride (PVC) pipe to lagoon No. 1 in the south-central portion of the Facility. Lagoon No. 1 can be pumped via a floating pump connection to pasture No. 1, catch basin Nos. 1 through 7, or to two adjacent properties offsite to the south (refer to Photos 2, 6, and 7). It should be noted that the primary on-site Facility representative, Mr. Al Simoes, stated lagoon No. 1 was last pumped and applied to an adjacent property owned by Mr. Roger Montez immediately south of the Facility in Decemeber 2012 via valves located in the southwest corner of the lagoon (refer to Photos 8 and 9). Lagoon No. 1 and all catch basins were dry at the time of the inspection.

Mr. Simoes stated that the corrals are cleaned/scraped constantly and manure is stockpiled in the central-west portion of the Facility for public use (refer to Photo 15). Manure tracking manifests are not documented or maintained since the public removes manure from the stockpile 24-hours per day. Mortalities are removed from the Facility on an as-needed basis by Stiles Animal Removal, Inc.

FACILITY

CAFO Size: **Medium** (at time of inspection)
Total Acres: **Approx. 58**
Production Area Acres: **34.41**

CONTAINMENT STRUCTURES

Wastewater Lagoons: **1**
Evaporation Ponds: **0**
Catch Basins: **7**
Depth Markers: **1**
Other: **2 disposal pastures**

ANIMALS ONSITE DURING INSPECTION

Milk Cows: **320**
Dry Cows: **68**
Heifers: **93**
Calves: **N/A**
Other: **N/A**

INSPECTION OBSERVATIONS

1. The inspectors observed, during the inspection, that depth markers were not installed in lagoon No. 1 or basin Nos. 2 through 7 (refer to Photos 2, 3, and 4) to indicate the minimum capacity necessary to contain the runoff and direct precipitation of the 25-year, 24-hour rainfall event, as required by Permit Attachment B - Monitoring and Reporting Program, Section I.B.1. It should be noted that a depth marker had been installed in basin No. 1.

ANNUAL REPORT REVIEW

ANNUAL REPORT

Monitoring Year: **N/A** Reviewed: **No** Signed & Certified: **Unknown**

Submittal Date: **N/A**

REPORTED ANIMAL POPULATION

Milk Cows: **N/A** Dry Cows: **N/A** Heifers: **N/A**

Calves: **N/A** Other: **N/A**

MANURE INFORMATION

Amount of manure spread on cropland at the Facility: **N/A**

Amount of manure hauled away from the Facility: **N/A**

Name and location of the composting operation, or, if the manure was hauled to cropland, the owner or tenant, and the destination address: **N/A, all manure is stockpiled in the central-west portion of the Facility and hauled away via public consumers (refer to Photo 15)**

1. Weekly Storm Water Management Structure visual inspections for the 2012 and 2013 monitoring years did not contain the minimum required information as required by Permit Attachment B - Monitoring and Reporting Program, Section I.B.1-3. Specifically, the weekly inspections did not document each containment structure inspected or estimate freeboard for each pond or impoundment. In addition, multiple weekly inspection gaps were identified throughout the monitoring year inspection log (refer to Exhibit 1). The largest inspection gap identified was twenty-four (24) days between December 6, 2012 and December 30, 2012. Permit Attachment B - Monitoring and Reporting Program, Section I.B states "all containment structures, including but not limited to, ponds, berms, and wastewater distribution lines, shall be inspected at least once a week during the entire year and at least once each 24-hour period during a storm event in which rainfall exceeds 0.5 inches in 24 hours. The findings of these inspections shall be documented on the attached CAFO Weekly Storm Water Management Structure Inspections Log Sheet (Attachment 1[of the Permit])." The Discharger must conduct Weekly Storm Water Management Structure visual inspections as required by Permit Attachment B - Monitoring and Reporting Program, Section I.B.

2. The Annual Reports for the previous five years were not retained onsite or available for review at the time of the inspection. All monitoring data shall be maintained for at least five (5) years and shall be made available to Regional Board, SWRCB, USEPA staff and/or their authorized representatives (including an authorized contractor acting as their representative), upon request, as required by Permit Attachment B - Monitoring and Reporting Program, Section I.A.

3. Manure Tracking Manifests were not documented or maintained of all manure haul events that occur at the Facility as required by the Permit. Specifically, the Facility has a manure stockpile for public pick-up located in the central-east portion of the Facility, adjacent to Walker Avenue (refer to Photo 15). Mr. Simoes stated that maintaining Manure Tracking Manifests is impossible due to the fact that manure is constantly being removed

from the stockpile by public users. Provision VII.C.5.e of the Permit states "a manifest of the manure hauled away shall be prepared and submitted with an annual report in accordance with Monitoring and Reporting Program (Attachment B)." The Discharger must document and maintain Manure Tracking Manifests for all manure that is hauled from the Facility, as required by Provisions VII.C.5.e of the Permit.

ENGINEERED WASTE MANAGEMENT PLAN (EWMP) REVIEW

Did the inspector review the EWMP in the RWQCB file?	**Yes**
Did the Facility have a copy of the EWMP on-site and available for review?	**No**
EWMP preparation date:	**January 2004**
EWMP prepared by:	**Nolte Associates, Inc.**
Santa Ana RWQCB EWMP acceptance date:	**09-21-2005**
EWMP was certified by the Facility's engineer/consultant on:	**Unknown**

1. The EWMP was not retained onsite or available for review at the time of the inspection as required by Provision VII.C.3.c of the Permit. Mr. Al Simoes stated that he was unsure where the Facility EWMP was retained; however, he stated that the owner, Mr. Augustine Simoes, may retain a copy somewhere at the Facility. A copy of the EWMP in the RWQCB file was reviewed by the inspectors prior to the inspection. At the time of the EWMP preparation date, the existing animal population at the Facility was 800 milking cows and 130 dry cows. At the time of the inspection the animal population was approximately 320 milking cows, 68 dry cows, and 93 heifers.

2. The EWMP Site Plan was not representative of current Facility conditions at the time of the inspection as required by Provision VII.C.3.b of the Permit. Specifically, the EWMP Site Plan identifies that process wastewater from the milking barn is pumped from the milking barn sump to the western perimeter of the Facility, then north to a single valve head located in pasture No. 1 in the northwest corner of the Facility (refer to Exhibit 2). As explained by Mr. Simoes, process wastewater from the milking barn sump (refer to Photos 12 and 13) is piped to a corner valve system (where process wastewater can be diverted to lagoon No. 1 or to pasture No. 1 for disposal) located immediately southwest of corral No. 2, then is piped north along the western boundary of corral No. 2, and then west along the northern perimeter of the Facility to four (4) valves heads on the north side of pasture No. 1 adjacent to Riverside Avenue (refer to Photo 14). In addition, a proposed berm around basin No. 1 had not been constructed as outlined in the approved EWMP.

3. The EWMP was not fully implemented onsite at the Facility as required by the Permit. Specifically, Section V - 'Operation and Maintenance' of the EWMP states that "daily inspections should be made upon all ponds, berms, and wastewater distribution and application equipment following the first significant rain event of each winter season. These daily inspections should continue until large rain events cease in the spring." The Discharger was only conducting weekly visual inspections of containment structures at the time of the inspection. As a result, the Discharger was not fully implementing the approved EWMP. The Discharger shall fully implement the EWMP as required by Provision VII.C.3.b of the Permit.

4. The EWMP was not fully implemented onsite at the Facility as required by the Permit. Section V - 'Operation and Maintenance' of the EWMP states that "all of the disposal areas should be disked at least once each year" to assure maximum percolation during wet seasons. Mr. Simoes stated that pasture Nos. 1 and 2 at the Facility are disked every two years (refer to Photo 14). As a result, the Discharger was not fully implementing the approved EWMP. The Discharger shall fully implement the EWMP as required by Provision VII.C.3.b of the Permit.

NUTRIENT MANAGEMENT PLAN (NMP) REVIEW (IF APPLICABLE)

Did the Facility have a copy of the NMP on-site and available for review?	**N/A**
Date NMP was prepared:	**N/A**
NMP prepared by:	**N/A**
Santa Ana RWQCB NMP acceptance date:	**N/A**

1. The Discharger does not apply manure, litter, or process wastewater to croplands under their ownership or operational control; therefore, the Discharger is not required to develop, implement, and retain onsite a Nutrient Management Plan as stated in Provisions VII.C.3.d of the Permit

FACILITY HOUSEKEEPING, WASTEWATER, AND MANURE INFORMATION

Typical Depth of Manure in Corrals (in inches):	**6-12**
Estimated Freeboard in Fullest Lagoon (in feet):	**Full capacity (Approx. 10 feet)**
Date of Last Lagoon Solids Removal, per Facility Representative:	**Approx. 3 years ago**
Disposal Location for Lagoon Solids:	**On-site public manure stockpile at central-west perimeter (refer to Photo 15)**

REVIEW OF FACILITY HOUSEKEEPING

1. The inspectors observed, during the inspection, adequate housekeeping and pollution prevention practices at the Facility. Specifically, corrals and feed lanes appeared well-maintained. An outdoor scrap metal/equipment storage yard was observed in the central portion of the Facility, adjacent to basin No. 6A; however, the area was contained by an earthen berm.

CONDITION OF BERMS AND CONTAINMENT STRUCTURES

2. The inspectors observed, during the inspection, that vegetation growth potentially affecting the containment structure capacity was present in lagoon No. 1 (refer to Photos 2 and 5). The EWMP states that weed abatement be performed to ensure adequate capacity is maintained within the containment structures. As a result, the overall capacity of the containment structures at the Facility may be diminished. The Discharger must design and maintain all containment structures per the EWMP as required by Provision VII.C.3.a of the Permit.

3. The inspectors observed, during the inspection, that approximately six to eight inches (6-8") of accumulated manure solids was present in lagoon No. 1 (refer to Photos 2, 6, and 7). It should be noted that lagoon No. 1 did not contain a depth marker; therefore, the inspectors were unable to verify the exact depth of manure solids accumulation in the lagoon. The EWMP states that the frequency of solids removal from the basins should depend on the solids accumulation rates; however, "lagoon solids shall be removed every summer to ensure full capacity in the lagoons before the start of the next winter season." Mr. Simoes stated that the lagoon had not been cleaned within the past three (3) years. As a result, the overall capacity of the containment structures at the Facility may be diminished. The Discharger must design and maintain all containment structures per the EWMP as required by Provision VII.C.3.a of the Permit.

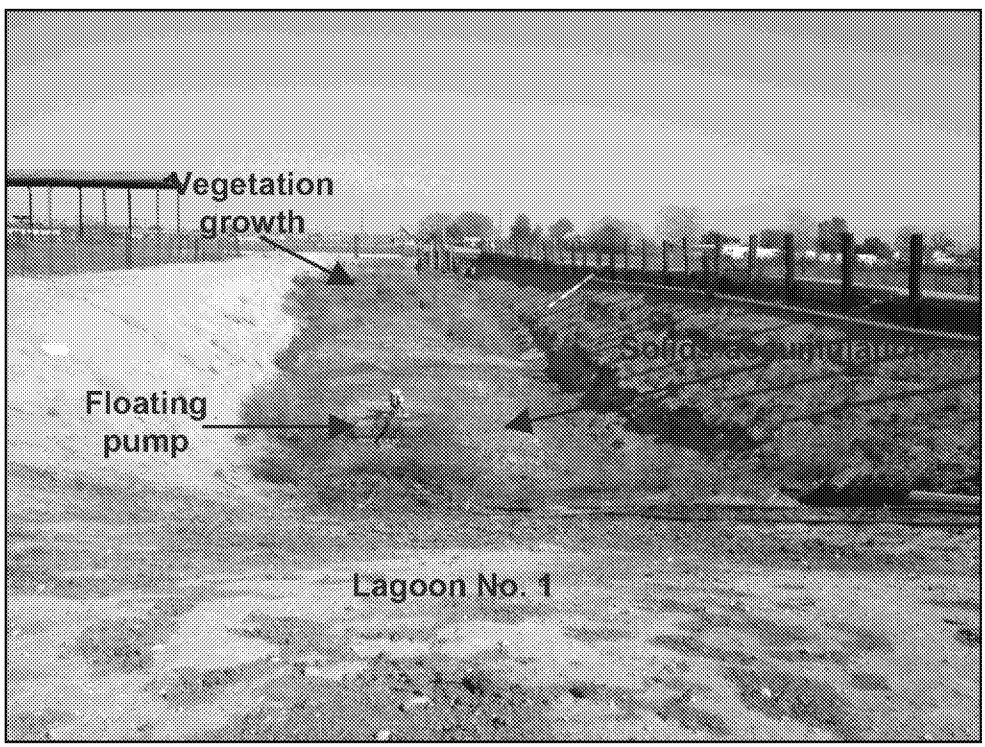
4. The inspectors identified an illegal process wastewater discharge practice during the inspection. The inspectors observed, during the inspection, a process wastewater line equipped with two valves in the southwest corner of lagoon No. 1 (refer to Photos 8 and 9). Mr. Simoes stated that the valves are used to send lagoon wastewater to two neighboring properties to the south of the Facility for land application. Mr. Simoes stated the last time

wastewater from the lagoon was applied at the neighboring properties was in Decemeber 2012. According to Mr. Simoes, the neighbors use the wastewater to irrigate pastures for livestock grazing. Discharge of process wastewater and/or storm water runoff from manured areas to property not owned or controlled by the Discharger is prohibited as stated in Discharge Prohibition IV.A of the Permit.

ITEMS FOR FOLLOW UP ON FUTURE INSPECTIONS

1. Verify that the EWMP is retained onsite and available for review
2. Verify that the approved EWMP and Site Plan are reflective of current Facility conditions
3. Ensure that Weekly Storm Water Management Structure visual inspections have been conducted and documented with the minimum required information
4. Verify that lagoon No. 1 has been adequately maintained
5. Verify that the Discharger has ceased the discharge of process wastewater offsite to adjacent properties not owned or operated by the Discharger

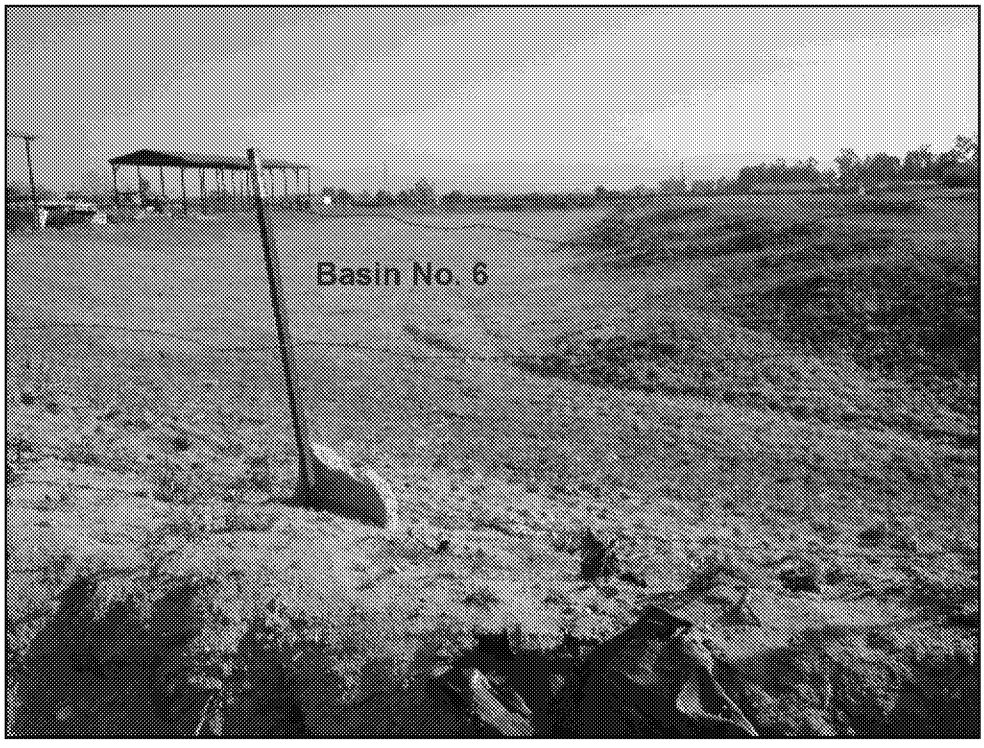
Photograph 1. Simoes Dairy -- Riverside Facility sign and mailbox.



Photograph 2. View facing west of lagoon No. 1. Note the lagoon did not contain a depth marker and was observed containing vegetation growth and accumulated solids.

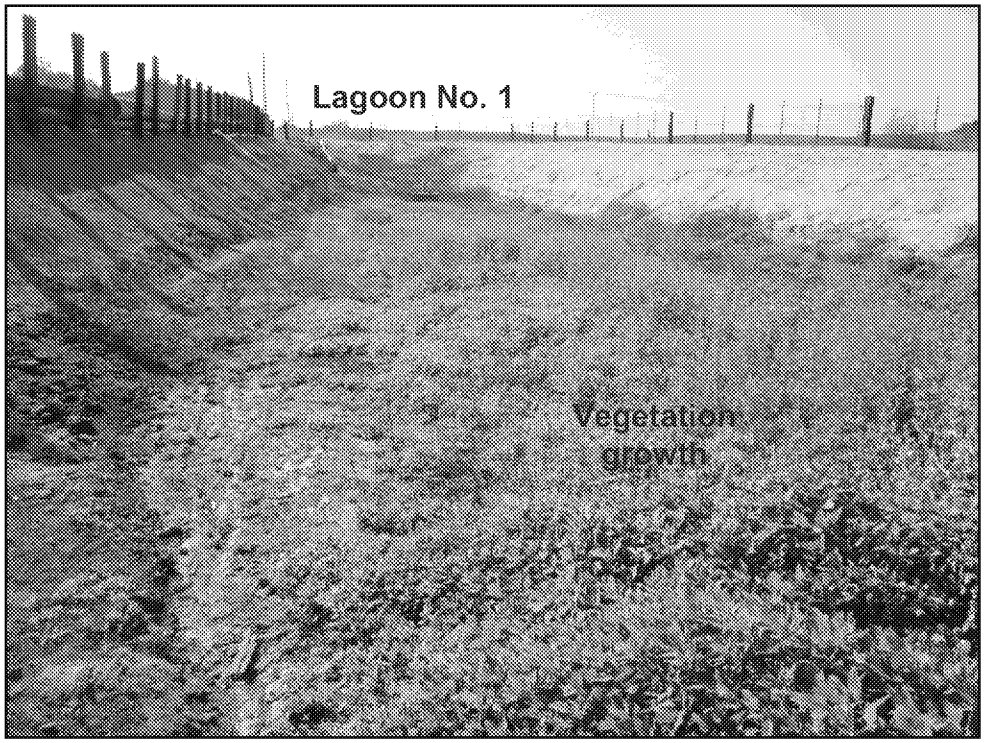
Inspection and Photograph Date: March 4, 2013

Photograph 3. View facing southeast of basin No. 3. Note the basin did not contain a depth marker.

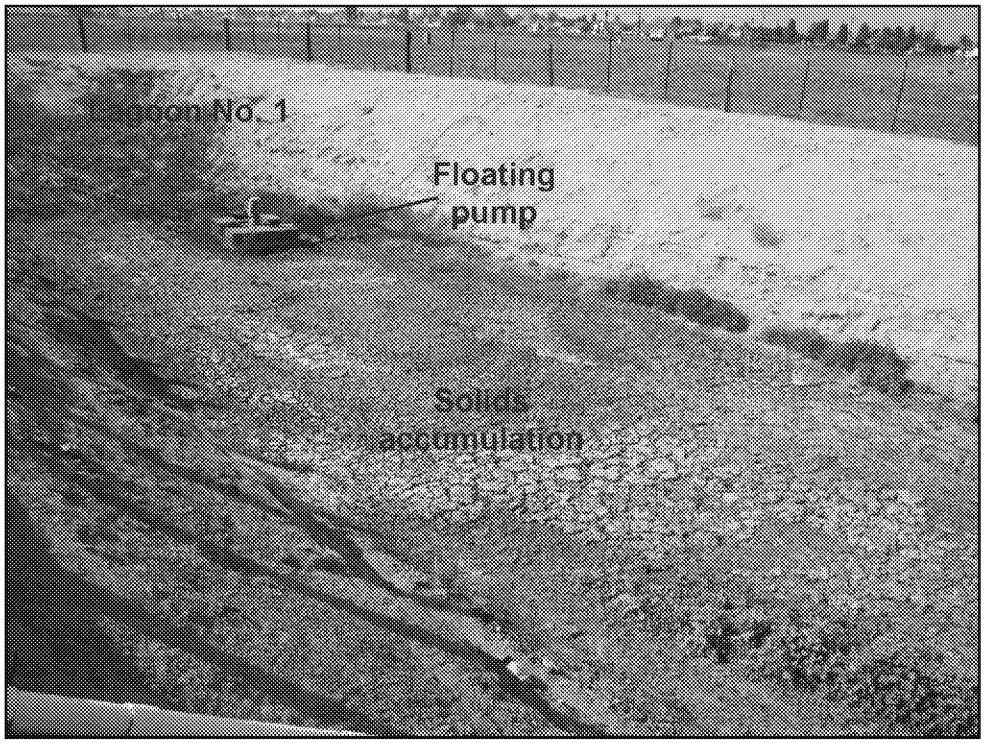


Photograph 4. View facing south of basin No. 6. Note the basin did not contain a depth marker.

Inspection and Photograph Date: March 4, 2013

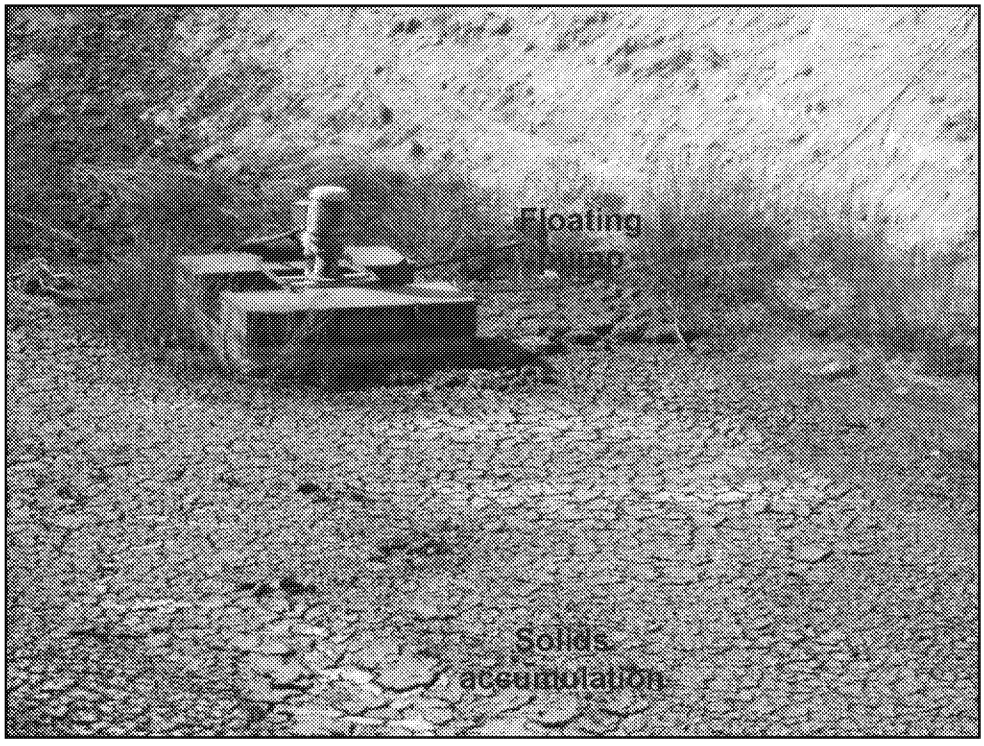


Photograph 5. View facing west of vegetative growth inside lagoon No. 1, also shown in Photograph 2.

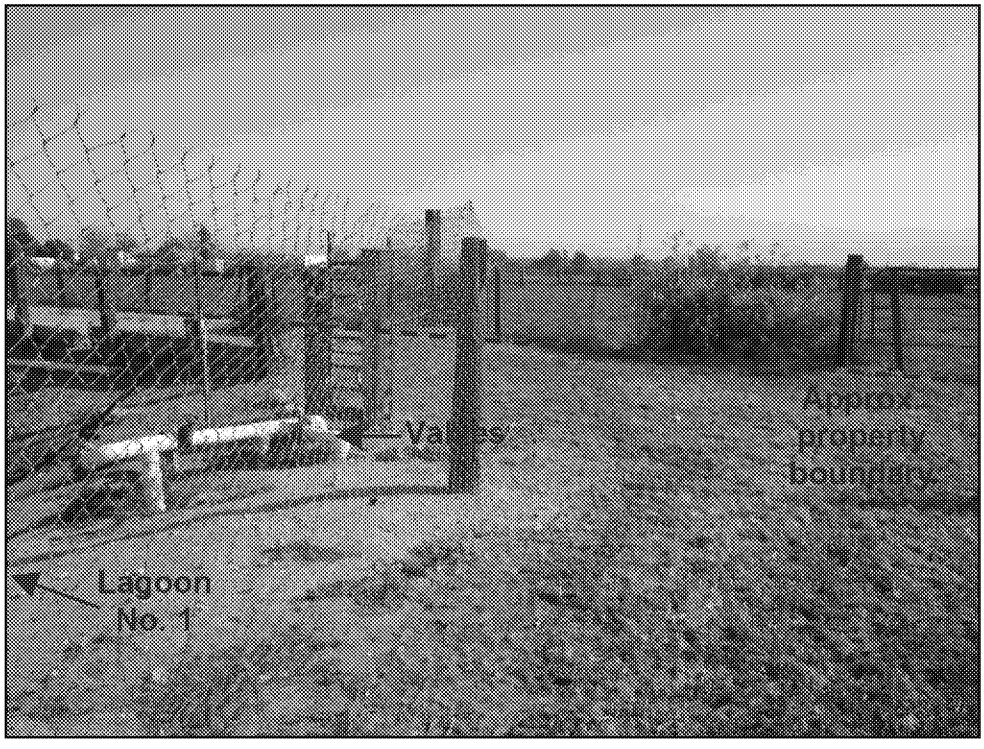


Photograph 6. View facing northwest into lagoon No. 1. Note the accumulated solids, also shown in Photograph 2.

Inspection and Photograph Date: March 4, 2013

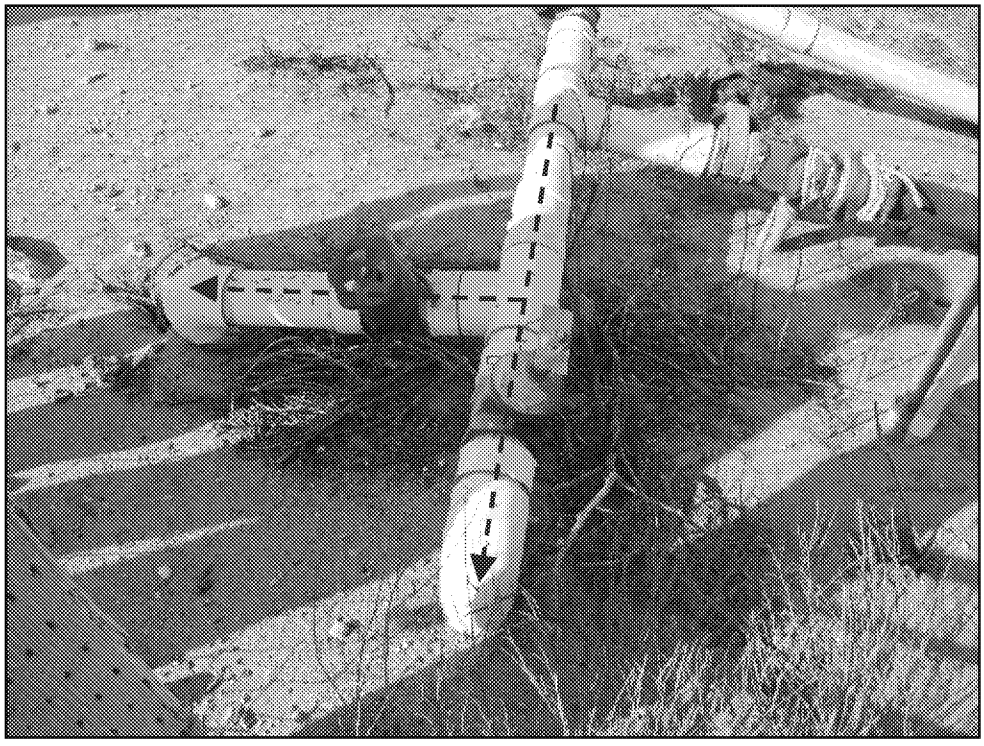


Photograph 7. Close-up view of accumulated solids and the floating pump in lagoon No. 1, shown in Photographs 2 and 6.

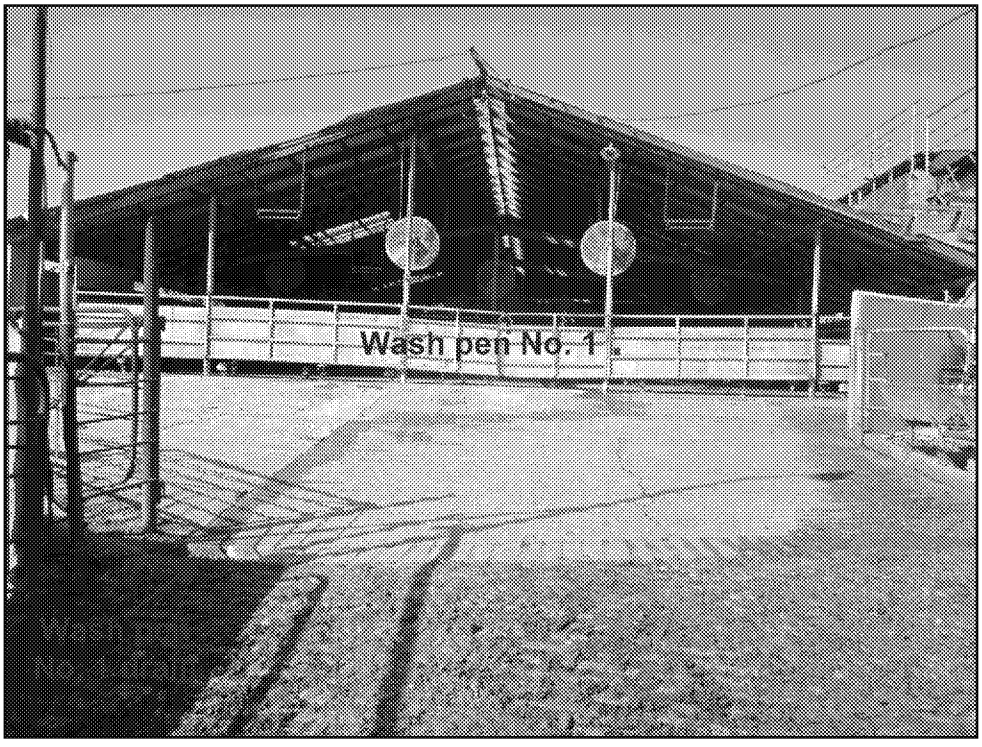


Photograph 8. View facing south of valves located in the southwest corner of lagoon No. 1. Note the valves are used to transfer process wastewater and storm water runoff from lagoon No. 1 to two neighboring properties south of the Facility.

Inspection and Photograph Date: March 4, 2013



Photograph 9. Close up view of the valves shown in Photograph 8. Both valves used to convey process wastewater and storm water runoff to offsite properties for irrigation purposes were closed at the time of the inspection.



Photograph 10. View facing north of wash pen No. 1 located on the south side of the milking barn. Note all wash water (i.e., process wastewater) from the Facility flows south down the concrete into a drain connected to the milking barn sump pump.

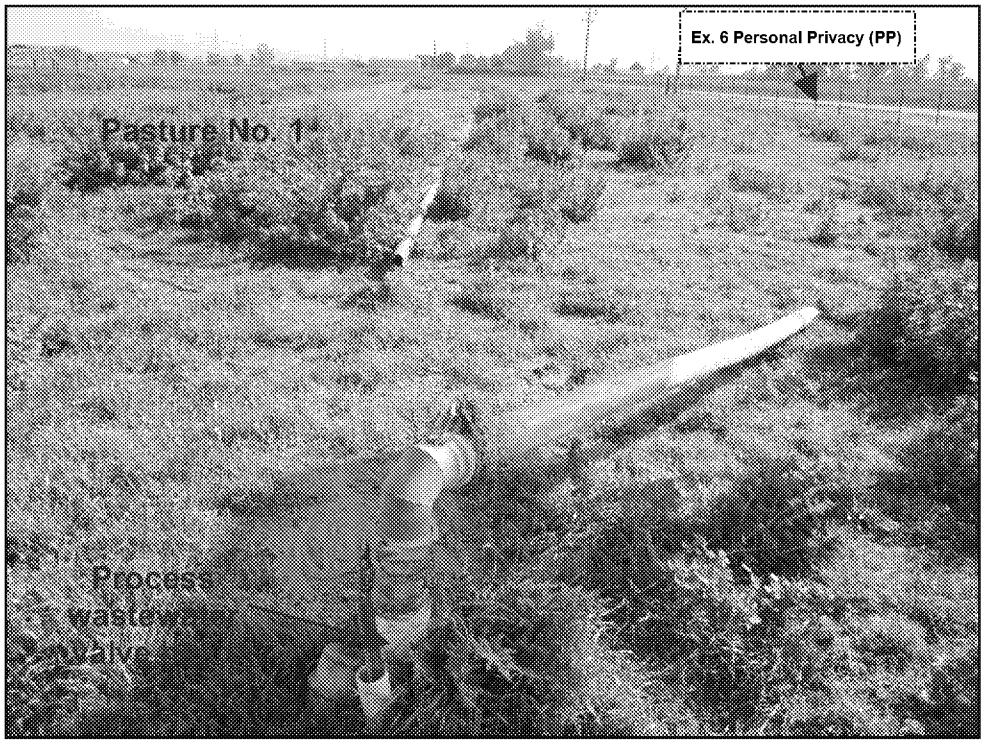
Inspection and Photograph Date: March 4, 2013

Photograph 11. Close-up view of the wash pen No. 1 drain, south of the milking barn. Note all wash water is captured in this drain, and is piped either to pasture No. 1 for land application or to lagoon No. 1 for storage and evaporation, via the process wastewater sump pump shown in Photograph 12.

Photograph 12. View facing west of the process wastewater sump pump located southwest of the milking barn.

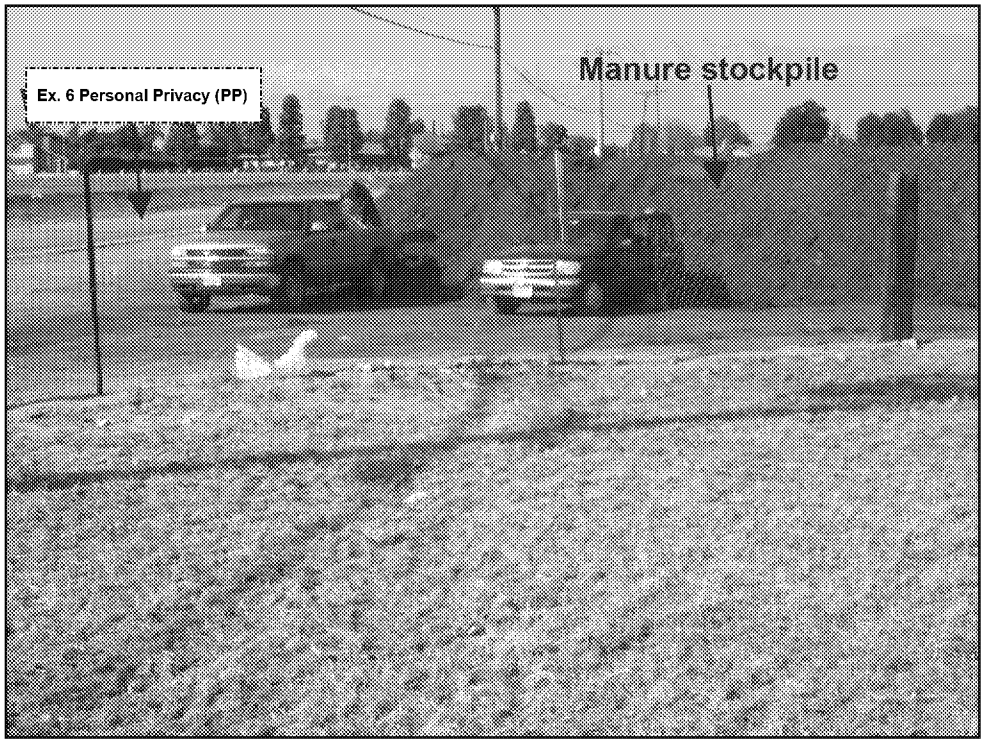
Inspection and Photograph Date: March 4, 2013

Photograph 13. Close-up view of the process wastewater sump pump located southwest of the milking barn.



Photograph 14. View facing south of pasture No. 1. Note the valve head and piping used for onsite land application of process wastewater and storm water. Also note four (4) valve heads were observed on the north side of pasture No. 1. The EWMP only identified one (1) valve head.

Inspection and Photograph Date: March 4, 2013



Photograph 15. View facing northwest of the manure stockpile located on the central-west perimeter of the Facility. Note the stockpile was available free for public use. Manure tracking manifests are not documented by the Discharger.

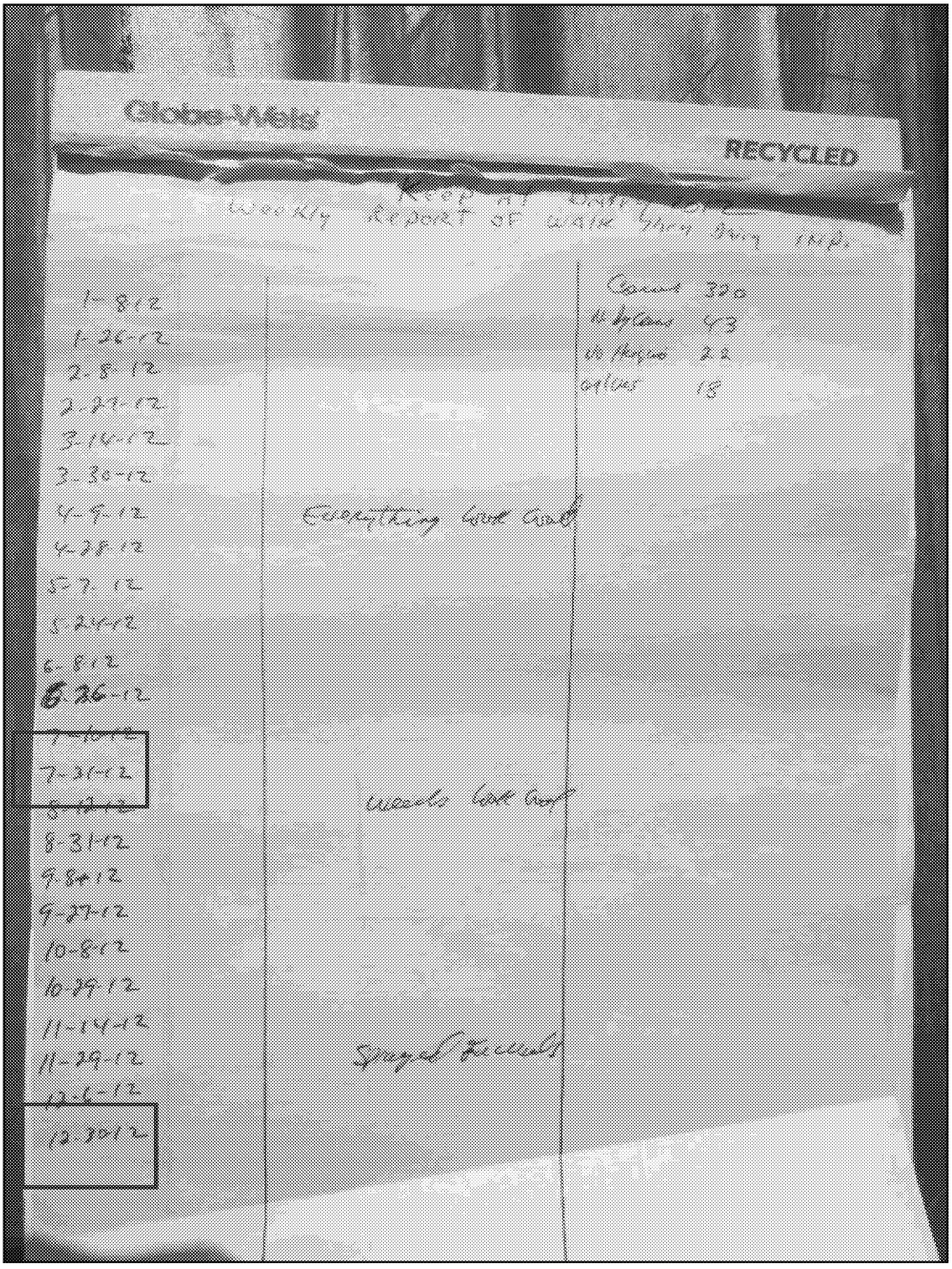


Exhibit 1. Discharger's Weekly Storm Water Management Structure visual inspections log from January 8, 2012 through December 30, 2012. Note the inspection log did not identify each containment structure/equipment inspected or estimate of freeboard for each containment structure. In addition, multiple inspection gaps were identified throughout the reporting year. Furthermore, the Discharger was not conducting daily inspections of all ponds, berms, and wastewater distribution and application equipment during the wet season as required by the approved EWMP.

Inspection Date: March 4, 2013

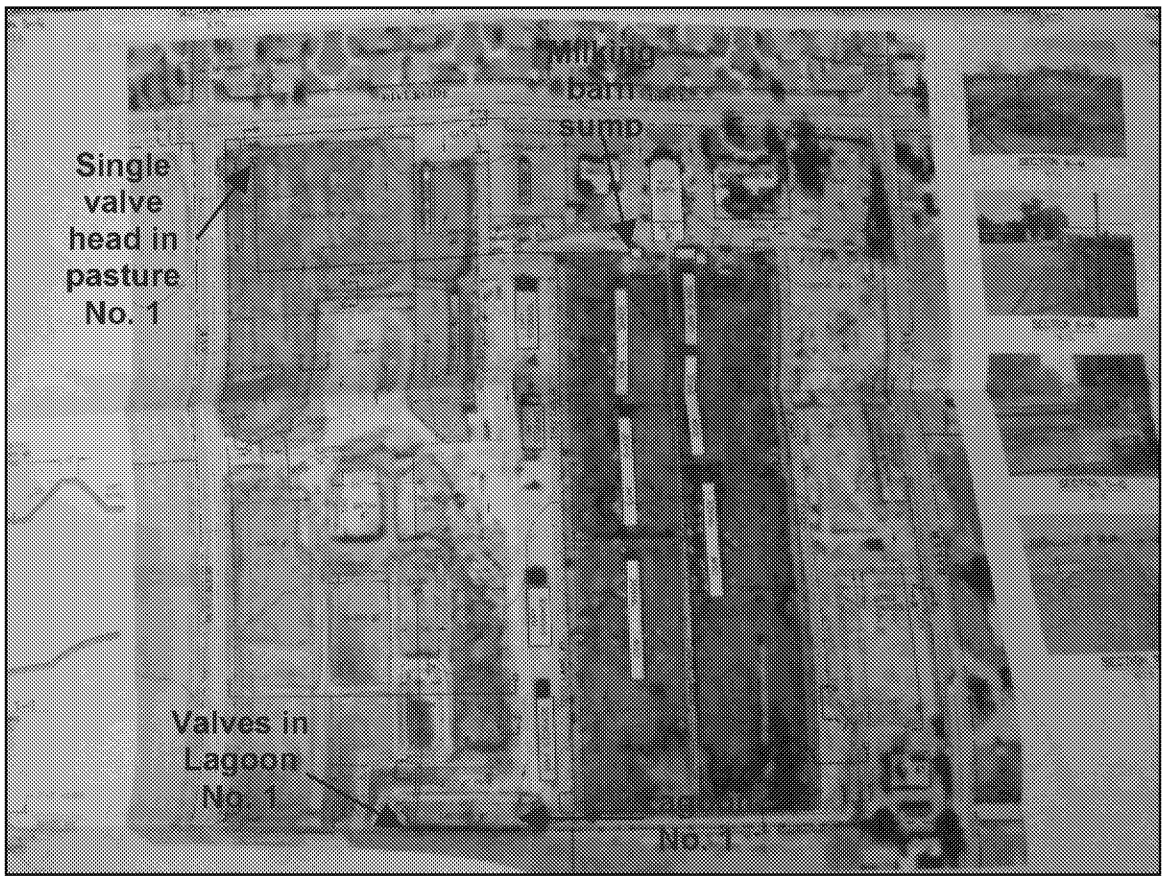


Exhibit 2. Simoes Dairy – Riverside Site Plan. Note the EWMP Site Plan was not reflective of current Facility conditions. The inspectors, observed during the inspection, that process wastewater and storm water disposed of onto pasture No. 1 is applied via four (4) valve heads. The Site Plan only identified one (1) valve head in Pasture No. 1.